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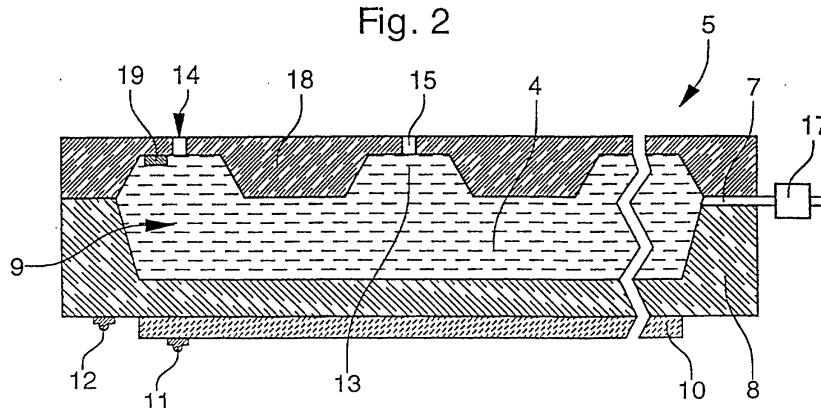
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(54) **Spray device for an inhaler suitable for respiratory therapies**

(57) The liquid droplet spray device (5) comprises a micromachined substrate (8, 18, 18a; 8a, 18, 18a), a space (9) within the substrate for containing a liquid substance (4), means for supplying (7) the liquid (4) to the space (9), and outlet means (13, 14, 15) for ejecting the liquid as a mono-dispersive droplet spray when the liquid undergoes a vibration. The outlet means comprises a tapered cavity (13) which is micromachined in the

space (9). The outlet means further comprises at least one output nozzle (14) and output channel (15) connecting the space (9) to the outlet nozzle (14), the outlet nozzle (14) and the output channel (15) having a non-tapered vertical shape. Thanks to such a device, the exact amount ejected may be determined accurately which allows for a predicted lung deposition of the droplets by using appropriate control means adapted to the kind of patient.

Fig. 2





European Patent
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A61M B05B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 October 2003	Examiner Villeneuve, J-M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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